

What is claimed is:

1. A base station for combined wireless data and wireless telephony communication utilizing the same frequency spectrum, comprising:

(a) a data transceiver for transmitting and receiving wireless data;

(b) a telephony transceiver for transmitting and receiving wireless voice signals; and

(c) a controller/synchronizer coupled to said data transceiver and said telephony transceiver for monitoring operation of said telephony transceiver and controlling operation of said data transceiver in response thereto.

2. A base station according to claim 1 wherein said controller/synchronizer prevents said data transceiver from transmitting when said telephony transceiver is receiving, and further wherein said controller/synchronizer prevents said data transceiver from receiving when said telephony transceiver is transmitting.

3. A base station according to claim 1 wherein said data transceiver includes a baseband portion and an RF portion, said telephony transceiver includes a baseband portion and an RF portion, and said controller/synchronizer is coupled to said respective baseband portions.

4. A base station according to claim 3 further comprising:

(d) a first antenna coupled to said RF portion of said data transceiver; and

(e) a second antenna coupled to said RF portion of said telephony transceiver.

5. A base station according to claim 1 wherein said data transceiver is a carrier sense multiplexing transceiver, and said telephony transceiver is a time division multiplexing transceiver.

6. A base station according to claim 5 wherein said data transceiver is a Home RF transceiver, and said telephony transceiver is a WDCT transceiver.

7. A base station according to claim 5 wherein said telephony transceiver transmits and receives according to a repeating frame having a plurality of time slots including transmit time slots, receive time slots, and blind time slots, and said controller/synchronizer monitors said repeating frame, prevents said data transceiver from transmitting when said telephony transceiver is receiving, and prevents said data transceiver from receiving when said telephony transceiver is transmitting.

8. A method for combined wireless data and telephony communication using the same frequency spectrum comprising the steps of:

- (a) providing separate data and telephony transceivers;
- (b) monitoring the telephony transceiver to determine whether telephony signals are being transmitted or received; and
- (c) controlling operation of the data transceiver in response said monitoring.

9. A method according to claim 8 wherein said step of controlling further comprises the steps of:

(a) preventing data transmission when telephony signals are being received; and

(b) preventing data reception when telephony signals are being transmitted.

10. A method according to claim 8 wherein the data transceiver includes a baseband portion and an RF portion, the telephony transceiver includes a baseband portion and an RF portion, and said step of monitoring includes monitoring the baseband portion of the telephony transceiver, and said step of controlling includes controlling the baseband portion of the data transceiver.

11. A method according to claim 10 further comprising the step of providing separate antennae for the respective RF portions.

12. A method according to claim 8 wherein the data transceiver is a carrier sense multiplexing transceiver, and the telephony transceiver is a time division multiplexing transceiver.

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13. A method according to claim 12 wherein the data transceiver is a Home RF transceiver, and the telephony transceiver is a WDCT transceiver.

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14. A method according to claim 12 wherein the telephony transceiver transmits and receives according to a repeating frame having a plurality of time slots including transmit time slots, receive time slots, and blind time slots, said  
15 step of monitoring includes monitoring the repeating frame, and said step of controlling includes preventing the data transceiver from transmitting when the telephony transceiver is receiving, and preventing the data transceiver from receiving when the telephony transceiver  
20 is transmitting.

15. A base station for combined wireless LAN and telephony using the same frequency spectrum, said base station comprising:

5 (a) a LAN transceiver;

(b) a telephony transceiver;

10 (c) control means for monitoring said telephony transceiver and controlling said LAN transceiver in response thereto.

15 16. A base station according to claim 15 wherein said control means prevents said LAN transceiver from transmitting when said telephony transmitter is receiving and prevents said LAN transceiver from receiving when said telephony transceiver is transmitting.

20 17. A base station according to claim 16 wherein said LAN transceiver is a carrier sense multiplex transceiver, and said telephony transceiver is a time division multiplex transceiver.

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18. A base station according to claim 17 wherein said LAN transceiver is a Home RF transceiver and said telephony transceiver is a WDCT transceiver.

5 19. A base station according to claim 17 wherein said telephony transceiver supports up to four simultaneous conversations.

10 20. A base station according to claim 19 wherein no more than 1/12 of the LAN transceiver bandwidth is sacrificed for each conversation in progress.